APPENDIX B-3

DAILY OPENING, CLOSING, AND CONTINUING CALIBRATION VERIFICATION REPORTS



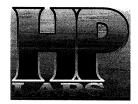
DATE: 11/14/01 HP Labs Project #GF111401T2 TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297 SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302 INSTRUMENT: SHIMADZU GC14A FRONT

				OPE	NING STANI	DARD		CLOSING STANDARD					
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	MASS	RT	AREA	RF	%DIFF	
CARBON TETRACHLORIDE	HALL	18.1	20	7.6	345	17.3	4.7%	20	7.6	354	17.7	2.2%	
CHLOROFORM	HALL	13.1	20	7.1	247	12.4	5.7%	20	7.1	269	13.5	2.7%	
1,1-DICHLORO ETHANE	HALL	13.4	20	5.7	248	12.4	7.5%	20	5.7	273	13.7	1.9%	
1,2-DICHLORO ETHANE	HALL	14.8	20	8.0	269	13.5	9.1%	20	8.0	265	13.3	10.5%	
1,1-DICHLORO ETHENE	PID	0.910	20	4.1	18.5	0.9	1.6%	20	4.1	17.9	0.9	1.6%	
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	6.5	23.6	1.2	1.7%	20	6.5	22.7	1.1	2.2%	
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	5.1	43.2	2.2	2.9%	20	5.1	41.3	2.1	1.7%	
DICHLOROMETHANE	HALL	11.0	20	4.8	227	11.4	3.2%	. 20	4.8	257	12.9	16.8%	
TETRACHLORO ETHENE	PID	1.05	20	12.9	21.0	1.1	0.0%	20	12.9	20.0	1.0	4.8%	
1,1,1,2-TETRACHLORO ETHANE	HALL	18.8	. 20	15.2	399	20.0	6.1%	20	15.2	391	19.6	4.0%	
1,1,2,2-TETRACHLORO ETHANE	HALL	15.9	20	18.3	364	18.2	14.5%	20	18.3	344	17.2	8.2%	
1,1,1-TRICHLORO ETHANE	HALL	13.5	20	7.4	254	12.7	5.9%	20	7.4	285	14.3	5.6%	
1,1,2-TRICHLORO ETHANE	HALL	8.90	20	12.6	191	9.6	7.3%	20	12.6	211	10.6	18.5%	
TRICHLORO ETHENE	PID	1.31	20	9.1	26.3	1.3	0.4%	20	9.1	25.3	1.3	3.4%	
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	7.70	40	4.1	245	6.1	20.5%	40	4.1	364	9.1	18.2%	
BENZENE	PID	2.41	20	8.0	48.9	2.4	1.5%	20	8.0	46.0	2.3	4.6%	
CHLOROBENZENE	PID	2.36	20	14.9	46.4	2.3	1.7%	20	14.9	42.5	2.1	10.0%	
ETHYLBENZENE	PID	1.94	20	15.2	38.3	1.9	1.3%	20	15.2	36.8	1.8	5.2%	
TOLUENE	PID	2.22	20	11.7	44.3	2.2	0.2%	20	11.7	41.9	2.1	5.6%	
m&p-XYLENES	PID	2.32	40	15.5	88.7	2.2	4.4%	40	15.5	85.6	2.1	7.8%	
o-XYLENE	PID	1.89	20	16.5	36.6	1.8	3.2%	20	16.5	35.6	1.8	5.8%	
1,4 DIFLUORO BENZENE	PID	0.870	20	8.6	18.0	0.9	3.4%	20	8.6	17.1	0.9	1.7%	
4 BROMOFLUORO BENZENE	PID	2.68	20	17.8	53.2	2.7	0.7%	20	17.8	53.0	2.7	1.1%	

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE



QA/QC - CALIBRATION DATA

DATE: 11/14/01

HP Labs Project #GF111401T2

TIOGA 2

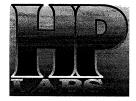
SUPPLY SOURCE: (CALIBRATION VERIFICATION)

ACCUSTANDARD LOT # B1070297

INSTRUMENT: SHIMADZU GC14A CONTINUING STANDARD CF COMPOUND DETECTOR **AVE RF** RT **AREA** %DIFF MASS CARBON TETRACHLORIDE 16 HALL 18 20 10.1 317 12.4% CHLOROFORM 11.8% HALL 13 20 9.2 231 11.6 1.1-DICHLORO ETHANE HALL 13 231 12 13.8% 20 7.7 15 12 16.2% 1,2-DICHLORO ETHANE HALL 20 10.3 248 1.1-DICHLORO ETHENE PID 0.91 20 5.8 16.6 8.0 8.8% 5.2% CIS-1,2-DICHLORO ETHENE PID 1.16 20 8.5 22.0 1.1 TRANS-1,2-DICHLORO ETHENE PID 2.10 6.9 39.3 2.0 6.4% 20 DICHLOROMETHANE HALL 11 20 6.8 217 10.9 1.4% TETRACHLORO ETHENE PID 1.05 20 15.7 19.9 1.0 5.2% 3.2% 1,1,1,2-TETRACHLORO ETHANE 18.2 HALL 19 20 18.2 364 16 15.6 1.9% 1,1,2,2-TETRACHLORO ETHANE HALL 20 21.0 312 1,1,1-TRICHLORO ETHANE HALL 14 9.6 247 12 8.5% 20 9 6.2% 1.1.2-TRICHLORO ETHANE HALL 20 14.9 189 6.5% TRICHLORO ETHENE PID 24.5 1.2 1.31 20 11.5 1,1,2-TRICHLOROTRIFLUOROETHANE (FR113) HALL 7.7 40 5.7 304 8 1.3% PID 45.7 2.3 5.2% BENZENE 2.41 20 10.3 CHLOROBENZENE PID 2.36 44.0 2.2 6.8% 20 17.6 **ETHYLBENZENE** PID 1.94 20 17.7 36.6 1.8 5.7% TOLUENE PID 2.1 6.5% 2.22 20 14.1 41.5 m&p-XYLENES PID 2.32 17.9 84.9 2.1 8.5% 40 o-XYLENE PID 1.89 20 19.1 35.3 1.8 6.6% 1.4 DIFLUORO BENZENE PID 0.87 20 10.7 16.7 0.8 4.0% 4 BROMOFLUORO BENZENE PID 2.68 20 51.7 2.6 3.5% 20.8

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE



DATE: 11/15/01 HP Labs Project #GF111401-T2 TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297 SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302 INSTRUMENT: SHIMADZU GC14A FRONT

TIUGA Z			IN2 I KOME	NI. OF	IIMADZU GC	14A FRON								
	OPENING STANDARD								CLOSING STANDARD					
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	MASS	RT	AREA	RF	%DIFI		
CARBON TETRACHLORIDE	HALL	18.1	20	7.6	323	16.2	10.8%	20	7.6	316	15.8	12.79		
CHLOROFORM	HALL	13.1	20	7.1	236	11.8	9.9%	20	7.1	225	11.3	14.1%		
1,1-DICHLORO ETHANE	HALL	13.4	20	5.7	232	11.6	13.4%	20	5.7	220	11.0	17.9%		
1,2-DICHLORO ETHANE	HALL	14.8	20	8.0	268	13.4	9.5%	20	8.0	268	13.4	9.5%		
1,1-DICHLORO ETHENE	PID	0.910	20	4.1	16.0	0.8	12.1%	20	4.1	17.2	0.9	5.5%		
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	6.5	20.9	1.0	9.9%	20	6.5	21.5	1.1	7.3%		
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	5.1	38.0	1.9	9.5%	20	5.1	40.1	2.0	4.5%		
DICHLOROMETHANE	HALL	11.0	20	4.8	224	11.2	1.8%	20	4.8	229	11.5	4.1%		
TETRACHLORO ETHENE	PID	1.05	20	12.9	19.0	1.0	9.5%	20	12.9	19.0	1.0	9.5%		
1,1,1,2-TETRACHLORO ETHANE	HALL	18.8	20	15.2	346	17.3	8.0%	20	15.2	328	16.4	12.8%		
1,1,2,2-TETRACHLORO ETHANE	HALL	15.9	20	18.3	293	14.7	7.9%	20	18.3	277	13.9	12.9%		
1,1,1-TRICHLORO ETHANE	HALL	13.5	20	7.4	241	12.1	10.7%	20	7.4	236	11.8	12.6%		
1,1,2-TRICHLORO ETHANE	HALL .	8.90	20	12.6	179	9.0	0.6%	20	12.6	173	8.7	2.8%		
TRICHLORO ETHENE	PID	1.31	20	9.1	23.5	1.2	10.3%	20	9.1	24.3	1.2	7.3%		
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	7.70	40	4.1	328	8.2	6.5%	40	4.1	325	8.1	5.5%		
BENZENE	PID	2.41	20	8.0	43.8	2.2	9.1%	20	8.0	44.1	2.2	8.5%		
CHLOROBENZENE	PID	2.36	20	14.9	42.4	2.1	10.2%	20	14.9	40.2	2.0	14.8%		
ETHYLBENZENE	PID	1.94	20	15.2	35.3	1.8	9.0%	20	15.2	34.8	. 1.7	10.3%		
TOLUENE	PID	2.22	20	11.7	40.1	2.0	9.7%	20	11.7	39.8	2.0	10.4%		
m&p-XYLENES	PID	2.32	40	15.5	81.9	2.0	11.7%	40	15.5	81.1	2.0	12.6%		
o-XYLENE	PID	1.89	20	16.5	33.9	1.7	10.3%	20	16.5	33.3	1.7	11.9%		
1,4 DIFLUORO BENZENE	PID	0.870	20	8.6	16.1	0.8	7.5%	20	8.6	16.4	0.8	5.7%		
4 BROMOFLUORO BENZENE	PID	2.68	20	17.8	49.8	2.5	7.1%	20	17.8	49.7	2.5	7.3%		

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE



DATE: 11/15/01

HP Labs Project #GF111401-T2

TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)

ACCUSTANDARD LOT # B1070297

INSTRUMENT: SHIMADZU GC14A

		CONTINUING STANDAR					
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	CF	%DIFF
CARBON TETRACHLORIDE	HALL	18	20	10.1	332	17	8.3%
CHLOROFORM	HALL	13	20	9.2	236	11.8	9.9%
1,1-DICHLORO ETHANE	HALL	13	20	7.7	231	12	13.8%
1,2-DICHLORO ETHANE	HALL	15	20	10.3	274	14	7.4%
1,1-DICHLORO ETHENE	PID	0.91	20	5.8	17.1	0.9	6.0%
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	8.5	22.5	1.1	3.0%
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	6.9	40.9	2.0	2.6%
DICHLOROMETHANE	HALL	11	20	6.8	216	10.8	1.8%
TETRACHLORO ETHENE	PID	1.05	20	15.7	20.2	1.0	3.8%
1,1,1,2-TETRACHLORO ETHANE	HALL	19	20	18.2	386	19.3	2.7%
1,1,2,2-TETRACHLORO ETHANE	HALL	16	20	21.0	303	15.2	4.7%
1,1,1-TRICHLORO ETHANE	HALL	14	20	9.6	247	12	8.5%
1,1,2-TRICHLORO ETHANE	HALL	9	20	14.9	204	10	14.6%
TRICHLORO ETHENE	PID	1.31	20	11.5	25.7	1.3	1.9%
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	7.7	40	5.7	326	8	5.8%
BENZENE	PID	2.41	20	10.3	47.8	2.4	0.8%
CHLOROBENZENE	PID	2.36	20	17.6	45.1	2.3	4.4%
ETHYLBENZENE	PID	1.94	20	17.7	37.7	1.9	2.8%
TOLUENE	PID	2.22	20	14.1	43.6	2.2	1.8%
m&p-XYLENES	PID	2.32	40	17.9	87.6	2.2	5.6%
o-XYLENE	PID	1.89	20	19.1	36.5	1.8	3.4%
1,4 DIFLUORO BENZENE	PID	0.87	20	10.7	17.2	0.9	1.1%
4 BROMOFLUORO BENZENE	PID	2.68	20	20.8	53.1	2.7	0.9%

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE



DATE: 11/19/01 HP Labs Project #GF111401T2 TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297 SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302 INSTRUMENT: SHIMADZU GC14A FRONT

TIUGA 2	INSTRUMENT: SHIMADZU GC14A FRONT												
					NING STANI	DARD		CLOSING STANDARD					
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	MASS	RT	AREA	RF	%DIFF	
CARBON TETRACHLORIDE	HALL	18.2	20	7.6	345	17.3	5.2%	20	7.6	359	18.0	1.4%	
CHLOROFORM	HALL	14.3	20	7.1	266	13.3	7.0%	20	7.1	263	13.2	8.0%	
1,1-DICHLORO ETHANE	HALL	13.2	20	5.7	263	13.2	0.4%	20	5.7	277	13.9	4.9%	
1,2-DICHLORO ETHANE	HALL	14.6	20	8.0	279	14.0	4.5%	20	8.0	268	13.4	8.2%	
1,1-DICHLORO ETHENE	PID	0.910	20	4.1	15.4	0.8	15.4%	20	4.1	16.7	8.0	8.2%	
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	6.5	20.6	1.0	11.2%	20	6.5	21.2	1.1	8.6%	
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	5.1	37.4	1.9	11.0%	20	5.1	39.2	2.0	6.7%	
DICHLOROMETHANE	HALL	13.7	20	4.8	255	12.8	6.9%	. 20	4.8	285	14.3	4.0%	
TETRACHLORO ETHENE	PID	1.05	20	12.9	19.0	1.0	9.5%	20	12.9	18.8	0.9	10.5%	
1,1,1,2-TETRACHLORO ETHANE	HALL	19.3	20	15.1	395	19.8	2.3%	20	15.1	395	19.8	2.3%	
1,1,2,2-TETRACHLORO ETHANE	HALL	17.0	20	18.3	363	18.2	6.8%	20	18.3	343	17.2	0.9%	
1,1,1-TRICHLORO ETHANE	HALL	14.1	20	7.4	261	13.1	7.4%	20	7.4	275	13.8	2.5%	
1,1,2-TRICHLORO ETHANE	HALL	11.80	20	12.6	241	12.1	2.1%	20	12.6	221	11.1	6.4%	
TRICHLORO ETHENE	PID	1.31	20	9.1	23.5	1.2	10.3%	20	9.1	23.7	1.2	9.5%	
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	9.90	40	4.1	381	9.5	3.8%	40	4.1	416	10.4	5.1%	
BENZENE	PID	2.41	20	8.0	43.5	2.2	9.8%	20	8.0	43.2	2.2	10.4%	
CHLOROBENZENE	PID	2.36	20	14.9	42.6	2.1	9.7%	20	14.9	39.6	2.0	16.1%	
ETHYLBENZENE	PID	1.94	20	15.2	35.6	1.8	8.2%	20	15.2	34.3	1.7	11.6%	
TOLUENE	PID	2.22	20	11.7	40.1	2.0	9.7%	20	11.7	39.2	2.0	11.7%	
m&p-XYLENES	PID	2.32	40	15.5	82.7	2.1	10.9%	40	15.5	79.9	2.0	13.9%	
o-XYLENE	PID	1.89	20	16.5	34.4	1.7	9.0%	20	16.5	33.2	1.7	12.2%	
1,4 DIFLUORO BENZENE	PID	0.870	20	8.6	15.9	0.8	8.6%	20	8.6	16.0	0.8	8.0%	
4 BROMOFLUORO BENZENE	PID	2.68	20	17.8	49.3	2.5	8.0%	20	17.8	49.4	2.5	7.8%	

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE DATA REVIEWED BY: TAMARA DAVIS



DATE: 11/19/01 SUPPLY SOURCE: (CALIBRATION VERIFICATION)

HP Labs Project #GF111401T2

ACCUSTANDARD LOT # B1070297

TIOGA 2 INSTRUMENT: SHIMADZU GC14A CONTINUING STANDARD COMPOUND DETECTOR AVE RF MASS RT AREA CF %DIFF CARBON TETRACHLORIDE HALL 18 0.8% 18 20 10.1 361 CHLOROFORM HALL 14 20 9.2 263 13.2 8.0% 1.1-DICHLORO ETHANE HALL 13 20 7.7 271 2.7% 14 1.2-DICHLORO ETHANE HALL 15 10.3 284 2.7% 20 14 1.1-DICHLORO ETHENE PID 0.91 20 5.8 15.5 8.0 14.8% CIS-1,2-DICHLORO ETHENE PID 1.16 20 8.5 20.6 1.0 11.2% TRANS-1,2-DICHLORO ETHENE PID 2.10 20 6.9 37.5 1.9 10.7% DICHLOROMETHANE HALL 14 6.8 13.1 4.7% 20 261 TETRACHLORO ETHENE PID 1.05 20 15.7 18.8 0.9 10.5% 1,1,1,2-TETRACHLORO ETHANE HALL 19 20 18.2 400 20.0 3.6% 1,1,2,2-TETRACHLORO ETHANE HALL 17 20 17.2 0.9% 21.0 343 1,1,1-TRICHLORO ETHANE HALL 14 20 9.6 269 13 4.6% 1.1.2-TRICHLORO ETHANE 12 HALL 20 14.9 218 11 7.6% TRICHLORO ETHENE PID 1.31 20 11.5 23.3 1.2 11.1% 1.1.2-TRICHLOROTRIFLUOROETHANE (FR113) HALL 9.9 40 5.7 369 9 6.8% BENZENE PID 2.41 20 10.3 43.4 2.2 10.0% CHLOROBENZENE PID 2.36 17.6 41.9 20 2.1 11.2% ETHYLBENZENE PID 1.94 20 17.7 34.9 1.7 10.1% TOLUENE PID 2.22 20 14.1 39.6 2.0 10.8% m&p-XYLENES PID 2.32 40 17.9 2.0 12.5% 81.2 o-XYLENE PID 1.89 33.8 1.7 20 19.1 10.6% 1.4 DIFLUORO BENZENE PID 0.87 20 10.7 15.9 0.8 8.6% 4 BROMOFLUORO BENZENE PID 2.68 20 20.8 49.3 2.5 8.0%

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE



DATE: 11/20/01 HP Labs Project #GF111401T2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297 SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302

TIOGA 2			NSTRUME	NT: SH	IIMADZU GC	14A FRON	Т					
				OPE	NING STANI	DARD		CLO	SING STAN	DARD		
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	MASS	RT	AREA	RF	%DIFF
CARBON TETRACHLORIDE	HALL	18.2	20	7.6	344	17.2	5.5%	20	7.6	332	16.6	8.8%
CHLOROFORM	HALL	14.3	20	7.1	265	13.3	7.3%	20	7.1	260	13.0	9.1%
1,1-DICHLORO ETHANE	HALL	13.2	20	5.7	257	12.9	2.7%	20	5.7	259	13.0	1.9%
1,2-DICHLORO ETHANE	HALL	14.6	20	8.0	268	13.4	8.2%	20	8.0	261	13.1	10.6%
1,1-DICHLORO ETHENE	PID	0.910	20	4.1	18.6	0.9	2.2%	20	4.1	15.3	0.8	15.9%
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	6.5	24.8	1.2	6.9%	20	6.5	20.7	1.0	10.8%
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	5.1	44.7	2.2	6.4%	20	5.1	37.4	1.9	11.0%
DICHLOROMETHANE	HALL	13.7	20	4.8	248	12.4	9.5%	20	4.8	252	12.6	8.0%
TETRACHLORO ETHENE	PID	1.05	20	12.9	22.4	1.1	6.7%	20	12.9	18.8	0.9	10.5%
1,1,1,2-TETRACHLORO ETHANE	HALL	19.3	20	15.1	386	19.3	0.0%	20	15.1	418	20.9	8.3%
1,1,2,2-TETRACHLORO ETHANE	HALL	17.0	20	18.3	351	17.6	3.2%	20	18.3	354	17.7	4.1%
1,1,1-TRICHLORO ETHANE	HALL	14.1	20	7.4	267	13.4	5.3%	20	7.4	260	13.0	7.8%
1,1,2-TRICHLORO ETHANE	HALL	11.80	20	12.6	233	11.7	1.3%	20	12.6	241	12.1	2.1%
TRICHLORO ETHENE	PID	1.31	20	9.1	27.7	1.4	5.7%	20	9.1	23.4	1.2	10.7%
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	9.90	40	4.1	346	8.7	12.6%	40	4.1	374	9.4	5.6%
BENZENE	PID	2.41	20	8.0	51.9	2.6	7.7%	20	8.0	43.4	2.2	10.0%
CHLOROBENZENE	PID	2.36	20	14.9	50.1	2.5	6.1%	20	14.9	42.2	2.1	10.6%
ETHYLBENZENE	PID	1.94	20	15.2	41.5	2.1	7.0%	20	15.2	35.1	1.8	9.5%
TOLUENE	PID	2.22	20	11.7	47.3	2.4	6.5%	20	11.7	39.7	2.0	10.6%
m&p-XYLENES	PID	2.32	40	15.5	96.5	2.4	4.0%	40	15.5	81.5	2.0	12.2%
o-XYLENE	PID	1.89	20	16.5	39.9	2.0	5.6%	20	16.5	33.7	1.7	10.8%
1,4 DIFLUORO BENZENE	PID	0.870	20	8.6	18.9	0.9	8.6%	20	8.6	15.9	0.8	8.6%
4 BROMOFLUORO BENZENE	PID	2.68	20	17.8	57.6	2.9	7.5%	20	17.8	49.8	2.5	7.1%

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE DATA REVIEWED BY: TAMARA DAVIS



QA/QC - CALIBRATION DATA

DATE: 11/20/01

HP Labs Project #GF111401T2

TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)

ACCUSTANDARD LOT # B1070297

INSTRUMENT: SHIMADZU GC14A

	CONTINUING STANDARD										
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	CF	%DIFF				
CARBON TETRACHLORIDE	HALL	18	20	10.1	351	18	3.6%				
CHLOROFORM	HALL	14	20	9.2	266	13.3	7.0%				
1,1-DICHLORO ETHANE	HALL	13	20	7.7	264	13	0.0%				
1,2-DICHLORO ETHANE	HALL	15	20	10.3	281	14	3.8%				
1,1-DICHLORO ETHENE	PID	0.91	20	5.8	15.1	0.8	17.0%				
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	8.5	20.4	1.0	12.1%				
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	6.9	37.0	1.9	11.9%				
DICHLOROMETHANE	HALL	14	20	6.8	250	12.5	8.8%				
TETRACHLORO ETHENE	PID	1.05	20	15.7	18.8	0.9	10.5%				
1,1,1,2-TETRACHLORO ETHANE	HALL	19	20	18.2	382	19.1	1.0%				
1,1,2,2-TETRACHLORO ETHANE	HALL	17	20	21.0	343	17.2	0.9%				
1,1,1-TRICHLORO ETHANE	HALL	14	20	9.6	278	14	1.4%				
1,1,2-TRICHLORO ETHANE	HALL	12	20	14.9	242	12	2.5%				
TRICHLORO ETHENE	PID	1.31	20	11.5	23.2	1.2	11.5%				
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	9.9	40	5.7	366	9	7.6%				
BENZENE	PID	2.41	20	10.3	43.0	2.2	10.8%				
CHLOROBENZENE	PID	2.36	20	17.6	42.3	2.1	10.4%				
ETHYLBENZENE	PID	1.94	20	17.7	35.0	1.8	9.8%				
TOLUENE	PID	2.22	20	14.1	39.6	2.0	10.8%				
m&p-XYLENES	PID	2.32	40	17.9	81.6	2.0	12.1%				
o-XYLENE	PID	1.89	20	19.1	33.7	1.7	10.8%				
1,4 DIFLUORO BENZENE	PID	0.87	20	10.7	15.8	8.0	9.2%				
4 BROMOFLUORO BENZENE	PID	2.68	20	20.8	48.6	2.4	9.3%				

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE



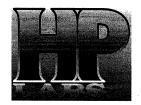
DATE: 11/21/01 HP Labs Project #GF111401T2 TIOGA 2

SUPPLY SOURCE: CONTINUING CALIBRATION (OPENING) ACCUSTANDARD LOT #B1070297 SUPPLY SOURCE: QUALITY CONTROL (CLOSING) ACCUSTANDARD LOT #B0120302 INSTRUMENT: SHIMADZU GC14A FRONT

TIUGA 2	INSTRUMENT: SHIMADZU GC14A FRONT													
				OPE	NING STANI	DARD			CLOSING STANDARD					
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	MASS	RT	AREA	RF	%DIFF		
CARBON TETRACHLORIDE	HALL	18.2	20	7.6	396	19.8	8.8%	20	7.6	389	19.5	6.9%		
CHLOROFORM	HALL	14.3	20	7.1	320	16.0	11.9%	20	7.1	290	14.5	1.4%		
1,1-DICHLORO ETHANE	HALL	13.2	. 20	5.7	301	15.1	14.0%	20	5.7	287	14.4	8.7%		
1,2-DICHLORO ETHANE	HALL	14.6	20	8.0	304	15.2	4.1%	20	8.0	286	14.3	2.1%		
1,1-DICHLORO ETHENE	PID	0.910	20	4.1	16.2	8.0	11.0%	20	4.1	16.7	0.8	8.2%		
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	6.5	21.9	1.1	5.6%	20	6.5	21.4	1.1	7.8%		
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	5.1	39.7	2.0	5.5%	20	5.1	39.9	2.0	5.0%		
DICHLOROMETHANE	HALL	13.7	20	4.8	304	15.2	10.9%	. 20	4.8	289	14.5	5.5%		
TETRACHLORO ETHENE	PID	1.05	20	12.9	19.9	1.0	5.2%	20	12.9	18.9	0.9	10.0%		
1,1,1,2-TETRACHLORO ETHANE	HALL	19.3	20	15.1	410	20.5	6.2%	20	15.1	397	19.9	2.8%		
1,1,2,2-TETRACHLORO ETHANE	HALL	17.0	20	18.3	385	19.3	13.2%	20	18.3	382	19.1	12.4%		
1,1,1-TRICHLORO ETHANE	HALL	14.1	20	7.4	314	15.7	11.3%	20	7.4	308	15.4	9.2%		
1,1,2-TRICHLORO ETHANE	HALL	11.80	20	12.6	260	13.0	10.2%	20	12.6	245	12.3	3.8%		
TRICHLORO ETHENE	PID	1.31	20	9.1	24.5	1.2	6.5%	20	9.1	23.8	1.2	9.2%		
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	9.90	40	4.1	400	10.0	1.0%	40	4.1	431	10.8	8.8%		
BENZENE	PID	2.41	20	8.0	45.7	2.3	5.2%	20	8.0	43.8	2.2	9.1%		
CHLOROBENZENE	PID	2.36	20	14.9	44.2	2.2	6.4%	20	14.9	40.4	2.0	14.4%		
ETHYLBENZENE	PID	1.94	20	15.2	36.7	1.8	5.4%	20	15.2	34.9	1.7	10.1%		
TOLUENE	PID	2.22	20	11.7	41.7	2.1	6.1%	20	11.7	39.8	2.0	10.4%		
m&p-XYLENES	PID	2.32	40	15.5	85.6	2.1	7.8%	40	15.5	81.4	2.0	12.3%		
o-XYLENE	PID	1.89	20	16.5	35.4	1.8	6.3%	20	16.5	34.1	1.7	9.8%		
1,4 DIFLUORO BENZENE	PID	0.870	20	8.6	16.7	0.8	4.0%	20	8.6	16.1	0.8	7.5%		
4 BROMOFLUORO BENZENE	PID	2.68	20	17.8	51.1	2.6	4.7%	20	17.8	49.4	2.5	7.8%		

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE DATA REVIEWED BY: TAMARA DAVIS



DATE: 11/21/01

HP Labs Project #GF111401T2

TIOGA 2

SUPPLY SOURCE: (CALIBRATION VERIFICATION)

ACCUSTANDARD LOT # B1070297

INSTRUMENT: SHIMADZU GC14A

				CONT	INUING STAND	DARÐ	
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	CF	%DIFF
CARBON TETRACHLORIDE	HALL	18	20	10.1	369	18	1.4%
CHLOROFORM	HALL	14	20	9.2	288	14.4	0.7%
1,1-DICHLORO ETHANE	HALL	13	20	7.7	281	14	6.4%
1,2-DICHLORO ETHANE	HALL	15	20	10.3	303	15	3.8%
1,1-DICHLORO ETHENE	PID	0.91	20	5.8	15.0	0.8	17.6%
CIS-1,2-DICHLORO ETHENE	PID	1.16	20	8.5	21.0	1.1	9.5%
TRANS-1,2-DICHLORO ETHENE	PID	2.10	20	6.9	37.4	1.9	11.0%
DICHLOROMETHANE	HALL	14	20	6.8	272	13.6	0.7%
TETRACHLORO ETHENE	PID	1.05	20	15.7	18.9	0.9	10.0%
1,1,1,2-TETRACHLORO ETHANE	HALL	19	20	18.2	434	21.7	12.4%
1,1,2,2-TETRACHLORO ETHANE	HALL	17	20	21.0	423	21.2	24.4%
1,1,1-TRICHLORO ETHANE	HALL	14	20	9.6	295	15	4.6%
1,1,2-TRICHLORO ETHANE	HALL	12	20	14.9	242	12	2.5%
TRICHLORO ETHENE	PID	1.31	20	11.5	23.3	1.2	11.1%
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	HALL	9.9	40	5.7	363	9	8.3%
BENZENE	PID	2.41	20	10.3	43.5	2.2	9.8%
CHLOROBENZENE	PID	2.36	20	17.6	42.5	2.1	10.0%
ETHYLBENZENE	PID	1.94	20	17.7	35.3	1.8	9.0%
TOLUENE	PID	2.22	20	14.1	40.0	2.0	9.9%
m&p-XYLENES	PID	2.32	40	17.9	82.7	2.1	10.9%
o-XYLENE	PID	1.89	20	19.1	34.3	1.7	9.3%
1,4 DIFLUORO BENZENE	PID	0.87	20	10.7	15.8	0.8	9.2%
4 BROMOFLUORO BENZENE	PID	2.68	20	20.8	50.4	2.5	6.0%

ANALYSES PERFORMED ON-SITE IN DOHS CERTIFIED MOBILE LABORATORY (CERT #1667)

ANALYSES PERFORMED BY: MARK BURKE